

## 33–500 Removal and installation of upper control arm

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### Tightening torques

Nm

Hex bolt of upper control arm  
bearing to front end

80

Hex nut of guide joint

40

Hex bolt of upper control arm  
support to torsion bar

65

### Special tools

Remover for guide joint



116 589 16 33 00

### Self-made tool

Spacing plate

refer to illustration  
item 9

### Notes

Loosen hex nuts on supporting and guide joint with the front spring installed only when the supporting jacks are resting against lower control arms instead of frame floor; if not, remove front spring.

Do not press off guide joint with front axle halves free of load, since this will damage rubber sleeve.

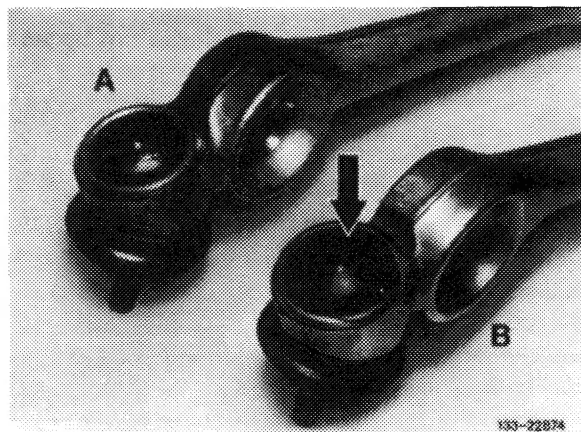
During assembly jobs, immediately replace damaged sleeves of supporting or guide joint.

Do not replace damaged or leaking sleeves on joints which have already been used. In such a case, always replace supporting joint or upper control arm.

The upper control arm bearing on front end, the upper control arm support on torsion bar, as well as the torsion bar bearing on front end may be tightened only when vehicle is in condition ready for driving. During assembly jobs, no preloads should occur on upper control arm via the torsion bar. If required, lift front axle half slightly at lower control arm on opposite side of vehicle.

Replace self-locking screws and nuts on principle!

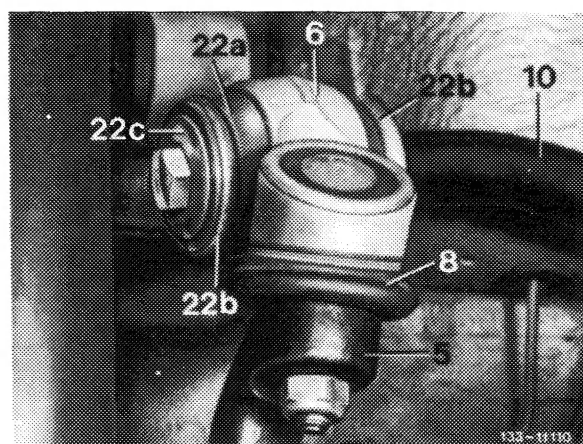
Starting September 1981, the upper control arms are provided with a plastic coating in range of cover at upper part of guide joint.



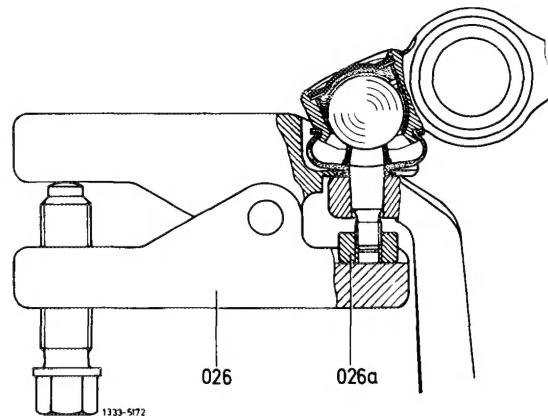
## Removal

1 Jack-up vehicle at the front, raise supporting jacks outside front against lower control arms, remove front wheel.

2 Loosen hex nut of guide joint (8).

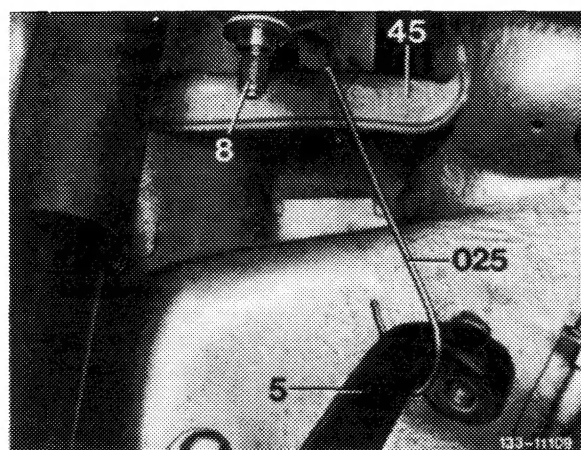


3 Remove guide joint from steering knuckle with respective tool.



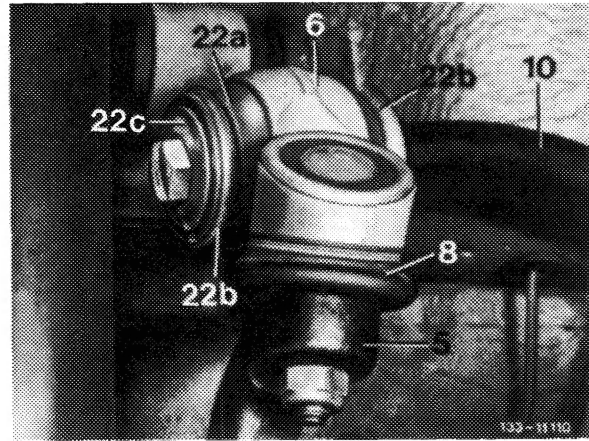
026 Remover  
026a Thrust piece

4 Protect steering knuckle (5) by means of a suitable hook at end stop (45) of upper control arm against tilting.



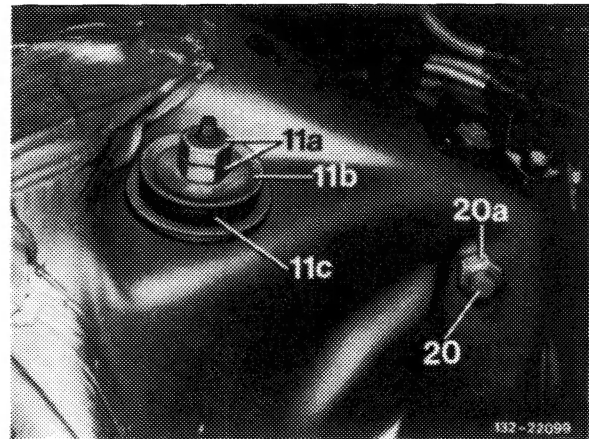
5 Remove support of upper control arm.

- 5 Steering knuckle
- 6 Upper control arm
- 8 Guide joint
- 10 Torsion bar
- 22a Rubber bearing
- 22b Disc washer
- 22c Cone washer



6 Loosen hex screw (20) of upper control arm bearing at front end from direction of engine compartment, unscrew and remove upper control arm.

- 11a Hex. nuts
- 11b Disc
- 11c Upper rubber ring
- 20 Hex. head screw
- 20a Hex. nut



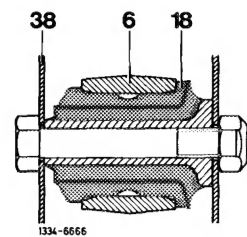
## Installation

7 Check guide joint and rubber bearing in upper control arm (33-425).

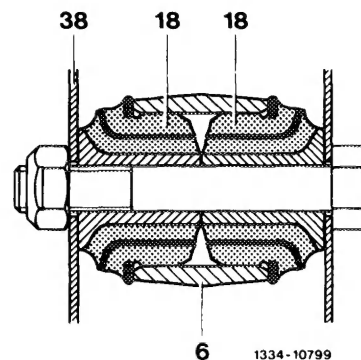
8 Attach upper control arm to front end.

**Note:** Starting September 1978, the hex. head screw is mounted from the rear toward the front.

- 1st version
- 1-part rubber bearing
- 6 Upper control arm
- 18 Rubber bearing
- 38 Front end

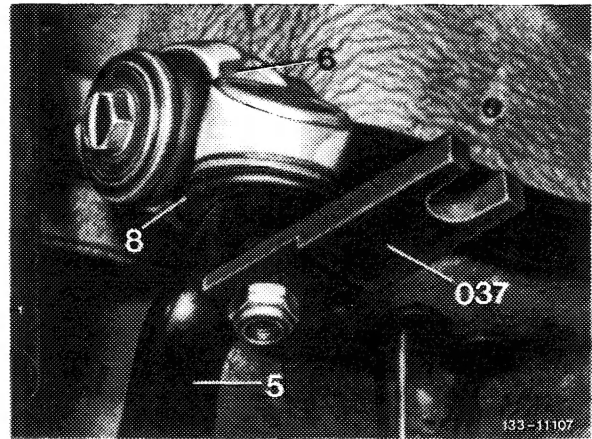


- 2nd version
- 2-part rubber bearing
- 6 Upper control arm
- 18 Rubber bearing
- 38 Front end



9 Connect guide joint (8) with steering knuckle (5).

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|-----|-------------------|
| 5   | Steering knuckle  |
| 6   | Upper control arm |
| 8   | Guide joint       |
| 037 | Spacing plate     |

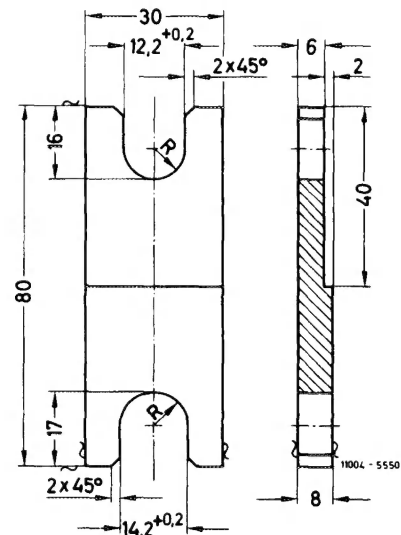


### Attention!

Use new self-locking hex nut. Keep cone of ball pin and seat in steering knuckle free of grease.

If ball pin moves along on guide joint when tightening hex nut, insert spacing plate and draw cone of ball pin into steering knuckle by tightening hex nut. Then loosen hex nut, remove spacing plate and tighten hex nut to specified torque.

The spacing plate can be self-made.



10 Mount support of upper control arm to torsion bar.

11 Mount front wheel, lower vehicle.

12 Check adjustment of front wheels (40–320).

13 Check adjustment of headlamps.

- |     |                   |
|-----|-------------------|
| 6   | Upper control arm |
| 10  | Torsion bar       |
| 22a | Rubber bearing    |
| 22b | Disc washer       |
| 22c | Cone washer       |

